TOWN OF HINGHAM
CONTRIBUTORY RETIREMENT SYSTEM

Actuarial Valuation Report

January 1, 2007

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Report Summary:

Highlights	**January 1, 2006**	**January 1, 2007**
Contributions		
Funding Schedule FY 2008	$3,066,910	$3,024,454
Funding Schedule FY 2009	3,182,140	3,136,021
Funded Ratios		
GAS No. 25	68.0%	73.4%
Participants		
Actives	511	520
Retirees and Beneficiaries	237	237
Vested	0	0
Inactives	80	81
Disabled	22	21
Total	850	859
Payroll		
Payroll of Active Members	$18,005,014	$19,177,310
Average Payroll	35,235	36,879
Normal Cost		
Employer	1,355,478	1,289,924
Employee	1,453,600	1,561,800
Administrative Expenses	100,000	100,000
Total	2,909,078	2,951,724
Actuarial Accrued Liabilities		
Actives	41,532,597	44,342,150
Retirees, Beneficiaries, Disabilities and Inactives	43,896,551	43,861,992
Total	85,429,148	88,204,142
Actuarial Value of Assets	58,096,713	64,778,166
Unfunded Actuarial Accrued Liabilities	$27,332,435	$23,425,976

Introduction

This report presents the findings of an actuarial valuation as of January 1, 2007, of Hingham Contributory Retirement System.

The actuarial valuation is based on:

- Provisions Chapter 32 of the Massachusetts General Laws, "M.G.L", as of January 1, 2007.
- Employee data provided by the Retirement Board
- Asset information reported to the Public Employee Retirement Administration Commission by the Town of Hingham Contributory Retirement System
- Actuarial assumptions approved by the Retirement Board

The valuation and appropriation forecast are prepared in accordance with Chapter 32 of the M.G.L. as of January 1, 2007.

The valuation and forecast do not account for:

- Any subsequent changes in the law
- Chapter 32 of the M.G.L., Section 3(8)(c) transfers between systems
- State-mandated benefits
- Cost-of-living increases granted to retired members between 1982 and 1997. The cost of these benefits has been assumed by the State under Proposition Two and One-Half.

Actuarial Experience

In performing the actuarial valuation, various assumptions are made regarding such factors as mortality, retirement, disability, and withdrawal rates as well as both payroll, salary increases, and investment returns. A comparison of the current valuation and the prior valuation is made to determine how closely actual experience corresponded to anticipated occurrences. This analysis of the system provides insight into the overall quality of the actuarial assumptions and helps explain any change in the annual appropriation.

During the last year, the total unfunded actuarial accrued liability decreased by 14.3% to $23,425,976. The decrease is the result of net favorable actuarial experience during the preceding year. The actuarial value of assets for 2006 had a return of 12.56%. The sources of the (gain)/loss are as follows:

Investment	(2,638,274)
Salary Gain	(135,849)
Retiree Mortality Loss	(828,980)
Active Decrements (Termination)	47,886
Active Decrements (Disability)	(238,102)
Active Decrements (Retirement)	(200,076)
Active Decrements (Death)	(35,916)
New Entrants	7,686
Other (Data corrections, Section 3(8)(c), software etc.)	(215,919)
Total (gain)/loss	(4,237,544)

Actuarial Costs and Liabilities:

Normal Costs

The normal cost is the sum of the individual normal costs determined for each member as if the assumptions underlying the cost determinations had been exactly realized. An individual normal cost represents that part of the cost of a member's future benefits which are assigned to the current year as if the costs are to remain level as a percentage of the member's pay. Benefits payable under all circumstances (i.e., retirement, death, disability, and terminations) are included in this calculation. Anticipated employee contributions to be made during the year are subtracted from the total normal cost to determine employer normal cost. The total normal cost is divided by total payroll to determine the normal cost as a percent of pay. The normal cost is shown in Table I.

Table I

	January 1, 2006	January 1, 2007
Superannuation	$1,994,807	$1,998,692
Termination	244,380	263,019
Death	143,173	149,804
Disability	426,718	440,209
Administrative Expenses	100,000	100,000
Total Normal Cost	2,909,078	2,951,724
% of Pay	16.2%	15.4%
Employee Contributions	1,453,600	1,561,800
% of Pay	8.1%	8.1%
Employer Normal Cost	$1,455,478	$1,389,924
% of Pay	8.1%	7.2%

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Present Value of Actuarial Accrued Liabilities

The actuarial accrued liabilities (AAL) represents today's value of all benefits based the past service of the actives and inactives. The AAL can be compared to the assets to determine the funded status of the Plan. The past service liabilities are shown in Table II below.

Table II

	January 1, 2006	January 1, 2007
Actives		
Superannuations	$36,992,809	$39,440,666
Termination	642,151	718,926
Death	1,324,922	1,409,311
Disability	2,572,715	2,773,247
Retirees and Inactives		
Retirees and Beneficiaries	38,032,067	38,416,418
Vested	0	0
Terminated (Refund)	345,441	340,850
Disabled	5,519,043	5,104,724
Total	$85,429,148	$88,204,142

Present Value of Future Benefits

The present value of future benefits represents today's value of all benefits earned by the inactive participants as well as all benefits earned and expected to be earned in the coming years by the active participants. The difference between the present value of future benefits and the present value of actuarial accrued liabilities is the value of benefits to be earned in the coming years. The value of the total expected benefits is shown in Table III.

Table III

	January 1, 2006	January 1, 2007
Actives		
Superannuation	$54,737,651	$57,264,615
Termination	1,626,946	1,774,008
Death	2,520,792	2,648,991
Disability	7,106,190	7,484,265
Retirees and Inactives		
Retirees and Beneficiaries	38,032,067	38,416,418
Vested	0	0
Terminated (Refund)	345,441	340,850
Disabled	5,519,043	5,104,724
Total	$109,888,130	$113,033,871

Funded Status and Appropriations:

Market Value of Plan Assets

The trust fund composition on a market value basis is shown in Table IV.

Table IV

	January 1, 2006	January 1, 2007
Cash equivalents	$384,456	$518,479
Short term investments	0	0
Fixed income securities	0	0
Equities	0	0
International	0	0
Real Estate	0	0
Venture Capital	0	0
Other	61,040,403	70,132,045
Accounts receivable	1,293,532	1,327,759
Accounts payable	(7,193)	(2,544)
Accrued income	0	0
Total Market Value	$62,711,198	$71,975,740
Total Actuarial Value	$58,096,713	$64,778,166

Actuarial Value of Assets

The actuarial value of assets is determined by projecting the market value of assets as of the beginning of the prior plan year with the assumed rate of return during that year (8%) and accounting for deposits and disbursements with interest at the assumed rate of return. An adjustment is then applied to recognize the difference between the actual investment return and expected return over a five year period. This preliminary actuarial value is not allowed to differ from the market value of assets by more than 10%. The calculation of the actuarial value of assets as of January 1, 2007 is presented in Table V.

Table V

		January 1, 2007
(1)	Market value at January 1, 2006	$62,711,198
(2)	2006 Contributions	$4,999,594
(3)	2006 Payments	($5,580,900)
(4)	Net interest adjustment at 8% on (1), (2), and (3) to December 31, 2006	$4,993,645
(5)	Expected market value on January 1, 2007 (1) + (2) + (3) + (4)	$67,123,537
(6)	Actual market value on January 1, 2007	$71,975,740
(7)	2006 (Gain) / Loss	($4,852,203)
(8)	80% of 2006 (Gain) / Loss	($3,881,762)
(9)	2005 (Gain) / Loss	($2,152,046)
(10)	60% of 2005 (Gain) / Loss	($1,291,228)
(11)	2004 (Gain) / Loss	($2,775,535)
(12)	40% of 2004 (Gain) / Loss	($1,110,214)
(13)	2003 (Gain) / Loss	($6,892,149)
(14)	20% of 2003 (Gain) / Loss	($1,378,430)
(15)	Actuarial value on January 1, 2007, (6) + (8) + (10) + (12) + (14) but not less than 90% nor greater than 110% of (6)	$64,778,166
	Ratio of actuarial value to market value	90.00%

Unfunded Actuarial Accrued Liabilities

Under the Entry Age Normal Actuarial Cost Method, the Actuarial Accrued Liability represents what the accumulated assets would have been as of the valuation date if:

- current plan provisions and assumptions had always been in effect,
- experience conformed exactly to assumptions, and
- the normal cost had been contributed each year since inception.

The actuarial value of the Fund's assets as of the end of the prior year are subtracted from the Actuarial Accrued Liability (AAL) to determine the Unfunded Actuarial Accrued Liability (UAAL) as of the valuation date. Over time, annual pension contributions will accumulate Plan assets equal to the AAL, and the UAAL will be eliminated. Thereafter, annual contributions equal to the normal cost will keep the Plan's assets and liabilities in balance. The UAAL is developed in Table VI.

Table VI

	January 1, 2006	January 1, 2007
Actuarial Accrued Liability	$85,429,148	$88,204,142
Actuarial Assets	58,096,713	64,778,166
Unfunded Actuarial Accrued Liability	$27,332,435	$23,425,976
Funded Status	68.0%	73.4%

Appropriations

The pension appropriation for the upcoming fiscal years have been calculated in accordance with the requirements set forth in Section 22D of Chapter 32 of the Massachusetts General Laws. These amounts were calculated to comply with the June 30, 2028, full funding mandate for all accrued liabilities. The pension appropriation is the sum of the:

- Employer normal cost,
- Increasing amortization of the prior unfunded actuarial accrued liability by June 30, 2028
  $ 27,663,520 over 21 years with 4.5% increasing payments
- Increasing amortization of the current (gains)/losses by June 30, 2028
  $ (4,237,544) over 21 years with 4.5% increasing payments
- Interest adjustment for payments deposited at the beginning of the fiscal year.

The pension appropriation is shown in Table VII.

Table VII

	January 1, 2006	January 1, 2007
Normal cost	$1,455,478	$1,389,924
Amortization payment of the prior accrued liability	1,433,746	1,795,377
Amortization payment of current (gains)/losses	284,319	(275,019)
Total cost	$3,173,543	$2,910,282
% of Pay	17.6%	15.2%
Fiscal 2008 cost	$3,066,910	$3,024,454
Fiscal 2009 cost	$3,182,140	$3,136,021

Appropriation Forecast

The following exhibit forecasts employer and employee contributions over the next 32 years under the adopted funding schedule.

Note that the forecast is based upon an "open group" method. This method assumes that sufficient employees will be hired each year to keep the number constant. The total payroll of the system is expected to increase 4.5% per year. The employee contribution rate is expected to increase to 10.5% by 2028 as members contributing base percentages 5%, 7%, and 8% are replaced by new members, whose base contribution is 9%. Payments are assumed to be made at the beginning of the year.

The employer total cost is expected to increase during the next 19 years until the unfunded liabilities are completely paid off, at which time only the normal cost will remain. The total cost represents 15.8% of payroll, decreasing to 13.3% by the time the unfunded liabilities are fully paid off, leaving only a normal cost of 5.1% thereafter. The decrease in the cost as a percentage of payroll is a result of the increase in member deductions.

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Appropriation Forecast

Fiscal Year Ending	Payroll*	Employee Contribution	Employer Normal Cost with Interest	Amortization Payments with Interest	Employer Total Cost with Interest	Employer Total Cost % of Payroll	Funded Ratio %**
2008	$19,177,310	$1,561,800	$1,444,451	$1,580,003	$3,024,454	15.8	73.4
2009	$20,040,289	$1,655,688	$1,484,918	$1,651,103	$3,136,021	15.6	74.5
2010	$20,942,102	$1,754,864	$1,526,102	$1,725,403	$3,251,505	15.5	75.5
2011	$21,884,497	$1,859,613	$1,567,985	$1,803,046	$3,371,031	15.4	76.6
2012	$22,869,299	$1,970,236	$1,610,548	$1,884,183	$3,494,731	15.3	77.7
2013	$23,898,417	$2,087,049	$1,653,765	$1,968,971	$3,622,736	15.2	78.8
2014	$24,973,846	$2,210,385	$1,697,611	$2,057,575	$3,755,186	15.0	79.9
2015	$26,097,669	$2,340,595	$1,742,055	$2,150,165	$3,892,220	14.9	81.0
2016	$27,272,064	$2,478,049	$1,787,060	$2,246,923	$4,033,983	14.8	82.1
2017	$28,499,307	$2,623,133	$1,832,589	$2,348,034	$4,180,623	14.7	83.3
2018	$29,781,776	$2,776,257	$1,878,596	$2,453,696	$4,332,292	14.5	84.5
2019	$31,121,956	$2,937,850	$1,925,033	$2,564,112	$4,489,145	14.4	85.7
2020	$32,522,444	$3,108,365	$1,971,845	$2,679,497	$4,651,342	14.3	86.9
2021	$33,985,954	$3,288,277	$2,018,972	$2,800,075	$4,819,047	14.2	88.2
2022	$35,515,322	$3,478,086	$2,066,348	$2,926,078	$4,992,426	14.1	89.6
2023	$37,113,511	$3,678,320	$2,113,898	$3,057,752	$5,171,650	13.9	91.0
2024	$38,783,619	$3,889,532	$2,161,544	$3,195,350	$5,356,894	13.8	92.4
2025	$40,528,882	$4,112,304	$2,209,198	$3,339,141	$5,548,339	13.7	93.8
2026	$42,352,682	$4,347,249	$2,256,763	$3,489,403	$5,746,166	13.6	95.3
2027	$44,258,553	$4,595,011	$2,304,135	$3,646,426	$5,950,561	13.4	96.9
2028	$46,250,187	$4,856,270	$2,351,201	$3,810,515	$6,161,716	13.3	98.4
2029	$48,331,446	$5,074,802	$2,457,005	$0	$2,457,005	5.1	100.0
2030	$50,506,361	$5,303,168	$2,567,571	$0	$2,567,571	5.1	100.0
2031	$52,779,147	$5,541,810	$2,683,111	$0	$2,683,111	5.1	100.0
2032	$55,154,209	$5,791,192	$2,803,851	$0	$2,803,851	5.1	100.0
2033	$57,636,148	$6,051,796	$2,930,025	$0	$2,930,025	5.1	100.0
2034	$60,229,775	$6,324,126	$3,061,876	$0	$3,061,876	5.1	100.0
2035	$62,940,115	$6,608,712	$3,199,660	$0	$3,199,660	5.1	100.0
2036	$65,772,420	$6,906,104	$3,343,645	$0	$3,343,645	5.1	100.0
2037	$68,732,179	$7,216,879	$3,494,109	$0	$3,494,109	5.1	100.0
2038	$71,825,127	$7,541,638	$3,651,344	$0	$3,651,344	5.1	100.0
2039	$75,057,258	$7,881,012	$3,815,654	$0	$3,815,654	5.1	100.0

* Calendar basis

** Beginning of Fiscal Year

GASB Statements No. 25 and No. 27

Effective for periods beginning after June 15, 1997, the Governmental Accounting Standards Board (GASB) requires the disclosure of pension related liabilities for public employer financial statements in accordance with Statements 25 and 27. These statements, which replace GASB Statement No. 5, must be adhered to by any public employee retirement system that follows Generally Accepted Accounting Principles (GAAP).

These disclosures are intended to establish a reporting framework that distinguishes between:

- current financial information about plan assets and financial activities,
- actuarially determined information from a long-term perspective,
- the funded status of the plan, and
- progress being made in accumulating sufficient assets to pay benefits when due.

Footnote disclosures required by GASB Statement No. 25 and 27 include a description of the plan, a summary of significant accounting policies, and information about contributions, legally required reserves, and investment concentrations. As a result of the oversight of the Public Employees Retirement Administration Commission (PERAC) and the conversion of unpaid contributions to pension related debt, the Net Pension Obligation (NPO) as required by Statement No. 27 will effectively always be equal to $0. The required disclosure information is shown in Table VIII.

Table VIII

		January 1, 2006	January 1, 2007
(1)	Actuarial Accrued Liability	$85,429,148	$88,204,142
(2)	Actuarial Value of Assets	58,096,713	64,778,166
(3)	Unfunded Actuarial Accrued Liability	27,332,435	23,425,976
(4)	Funded Ratio (2)/(1)	68.0%	73.4%
(5)	Covered Payroll	$18,005,014	$19,177,310
(6)	UAAL as a percentage of payroll: (3)/(5)	151.8%	122.2%
(7)	Annual Required Contribution (ARC)	$2,955,703	$3,024,454
(8)	Net Pension Obligation	$0	$0

PERAC Annual Statement
APPENDIX PAGE 3
ACTUARIAL VALUATION AND ASSUMPTIONS

The most recent actuarial valuation of the System was prepared by Buck Consultants as of January 1, 2007.

The normal cost for employees on that date was:	$1,561,800	8.1% of pay
The normal cost for the employer was:	1,289,924	6.7% of pay

The actuarial liability for active members was:	$44,342,150
The actuarial liability for retired members was:	43,861,992
Total actuarial accrued liability:	88,204,142
System assets as of that date:	64,778,166
Unfunded actuarial accrued liability:	$23,425,976

The ratio of system's assets to total actuarial liability was 73.4%

The principal actuarial assumptions used in the valuation are as follows:

Investment Return:	8.0%
Rate of Salary Increase:	5.0%

SCHEDULE OF FUNDING PROGRESS

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (b)	Unfunded Actuarial Accrued Liability (b-a)	Funded Ratio (a/b)	Covered Payroll (c)	UAAL as a percent of Covered Payroll (b-a)/c
01/01/07	$64,778,166	$88,204,142	$23,425,976	73.4%	$19,177,310	122.2%
01/01/06	58,096,713	85,429,148	27,332,435	68.0%	18,005,014	151.8%
01/01/04	53,284,103	75,260,838	21,976,735	70.8%	16,669,815	131.8%
01/01/02	44,876,764	71,631,723	26,754,959	62.6%	14,811,862	180.6%
01/01/00	48,884,485	57,861,551	8,977,066	84.5%	12,214,509	73.5%
01/01/98	34,786,965	49,186,903	14,399,938	70.7%	10,919,733	131.9%
01/01/96	24,236,711	42,461,163	18,224,452	57.1%	10,109,832	180.3%

Attach Copy of Current Approved Funding Schedule

EXHIBITS

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Age/Service Distribution with Salary as of January 1, 2007

Attained Age	Average Salary <5	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	Total
< 20	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
20-24	10	0	0	0	0	0	0	0	0	10
	15,368	0	0	0	0	0	0	0	0	15,368
25-29	42	2	0	0	0	0	0	0	0	44
	31,835	68,345	0	0	0	0	0	0	0	33,495
30-34	19	10	0	0	0	0	0	0	0	29
	37,704	48,267	0	0	0	0	0	0	0	41,346
35-39	19	16	5	0	0	0	0	0	0	40
	32,741	52,631	53,990	0	0	0	0	0	0	43,353
40-44	30	8	5	15	0	0	0	0	0	58
	27,350	45,962	54,527	60,408	0	0	0	0	0	40,809
45-49	33	16	3	11	4	1	0	0	0	68
	23,723	32,883	36,106	51,000	61,696	74,616	0	0	0	33,819
50-54	38	21	14	10	8	13	2	0	0	106
	22,095	29,173	41,479	44,793	62,859	67,634	53,291	0	0	37,449
55-59	18	8	18	13	4	9	5	3	0	78
	23,374	25,840	27,644	44,843	51,504	71,323	85,249	69,344	0	40,900
60-64	14	14	13	6	1	3	3	2	1	57
	26,002	31,473	22,619	45,333	39,348	46,602	64,893	70,201	41,359	33,795
65-69	3	2	3	1	4	3	1	0	0	17
	20,536	22,341	42,607	63,186	25,541	46,220	41,902	0	0	34,119
70+	4	0	3	2	1	2	1	0	0	13
	19,974	0	14,293	17,036	41,621	22,092	41,286	0	0	21,841
Total Employees	230	97	64	58	22	31	12	5	1	520
Average Salary	26,950	37,731	34,280	49,436	51,764	61,884	67,558	69,687	41,359	36,879

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Retiree Distribution as of January 1, 2007

	Number of Employees			Total Payments		
Attained Age	Male	Female	Total	Male	Female	Total
< 20	0	0	0	0	0	0
20-24	0	0	0	0	0	0
25-29	0	0	0	0	0	0
30-34	0	0	0	0	0	0
35-39	0	0	0	0	0	0
40-44	1	1	2	34,224	6,810	41,033
45-49	0	0	0	0	0	0
50-54	0	1	1	0	3,227	3,227
55-59	15	5	20	504,863	16,903	521,766
60-64	15	15	30	372,424	128,911	501,335
65-69	27	10	37	831,087	171,649	1,002,737
70-74	22	26	48	522,069	293,504	815,573
75-79	28	15	43	608,987	177,981	786,968
80-84	14	17	31	280,390	200,000	480,390
85-89	4	13	17	48,237	129,239	177,476
90-94	4	4	8	53,096	29,418	82,514
95-99	0	0	0	0	0	0
Total	130	107	237	3,255,378	1,157,641	4,413,019
Average (Age/Payment)	71.4	74.3	72.7	25,041	10,819	18,620
Frequency Percent	54.9	45.1	100	73.8	26.2	100

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Disabled Retiree Distribution as of January 1, 2007

	Number of Employees			Total Payments		
Attained Age	Male	Female	Total	Male	Female	Total
< 20	0	0	0	0	0	0
20-24	0	0	0	0	0	0
25-29	0	0	0	0	0	0
30-34	0	0	0	0	0	0
35-39	1	0	1	40,417	0	40,417
40-44	1	0	1	36,413	0	36,413
45-49	0	0	0	0	0	0
50-54	1	0	1	5,760	0	5,760
55-59	4	1	5	137,996	9,783	147,779
60-64	3	0	3	89,132	0	89,132
65-69	3	0	3	81,391	0	81,391
70-74	2	0	2	64,087	0	64,087
75-79	0	0	0	0	0	0
80-84	4	0	4	57,087	0	57,087
85-89	1	0	1	14,067	0	14,067
90-94	0	0	0	0	0	0
95-99	0	0	0	0	0	0
Total	20	1	21	526,352	9,783	536,134
Average (Age/Payment)	65.7	55.9	65.2	26,318	9,783	25,530
Frequency Percent	95.2	4.8	100	98.2	1.8	100

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EXHIBIT 4 - CASHFLOW FORECAST:

The following is a 30 year forecast of benefit payments net of state reimbursable COLA payments, Contribution Income and Investment Returns.

Plan Year Ending	Benefit Payments	Employee Contributions	Employer Contributions	Investment Returns	Net change in plan assets
2007	$5,386,573	$1,561,800	$3,024,454	$5,106,531	$4,306,211
2008	5,684,443	1,655,688	3,136,021	5,446,370	4,553,635
2009	6,034,062	1,754,864	3,251,505	5,804,330	4,776,637
2010	6,376,928	1,859,613	3,371,031	6,180,772	5,034,488
2011	6,688,604	1,970,236	3,494,731	6,579,460	5,355,823
2012	7,096,061	2,087,049	3,622,736	7,000,513	5,614,237
2013	7,464,184	2,210,385	3,755,186	7,444,217	5,945,604
2014	7,900,109	2,340,595	3,892,220	7,912,227	6,244,934
2015	8,275,687	2,478,049	4,033,983	8,407,032	6,643,377
2016	8,701,130	2,623,133	4,180,623	8,932,260	7,034,886
2017	9,148,445	2,776,257	4,332,292	9,488,480	7,448,584
2018	9,618,755	2,937,850	4,489,145	10,077,450	7,885,690
2019	10,113,243	3,108,365	4,651,342	10,701,023	8,347,487
2020	10,633,153	3,288,277	4,819,047	11,361,156	8,835,327
2021	11,179,790	3,478,086	4,992,426	12,059,910	9,350,632
2022	11,754,530	3,678,320	5,171,650	12,799,463	9,894,903
2023	12,358,816	3,889,532	5,356,894	13,582,108	10,469,718
2024	12,994,168	4,112,304	5,548,339	14,410,263	11,076,739
2025	13,662,182	4,347,249	5,746,166	15,286,481	11,717,714
2026	14,364,538	4,595,011	5,950,561	16,213,451	12,394,485
2027	15,103,001	4,856,270	6,161,716	17,194,008	13,108,992
2028	15,879,428	5,074,802	2,457,005	18,072,692	9,725,070
2029	16,695,771	5,303,168	2,567,571	18,829,030	10,003,998
2030	17,554,080	5,541,810	2,683,111	19,606,503	10,277,344
2031	18,456,514	5,791,192	2,803,851	20,404,599	10,543,128
2032	19,405,341	6,051,796	2,930,025	21,222,646	10,799,127
2033	20,402,946	6,324,126	3,061,876	22,059,793	11,042,849
2034	21,451,836	6,608,712	3,199,660	22,914,981	11,271,517
2035	22,554,649	6,906,104	3,343,645	23,786,928	11,482,028
2036	23,311,665	7,216,879	3,494,109	24,689,888	12,089,212

amounts in thousands

EXHIBIT 5 – SUMMARY OF PLAN PROVISIONS:

This summary is prepared in accordance with Chapter 32 as of January 1, 2007, and does not take into account any subsequent changes.

1. Administration

Each of the 107 contributory retirement systems for public employees of the Commonwealth of Massachusetts are guided by the applicable provisions of Chapter 32 of the Massachusetts General Laws and other applicable statutes. Although these boards operate semi-independently, there is a uniform set of rules governing benefits, eligibility, contributions, financing, and accounting.

2. Participation

Participation is mandatory for all full-time employees whose employment commences prior to age 65. Eligibility with respect to part-time, professional, temporary, or intermittent employment is governed by the local board. Membership is optional for certain elected officials, State officials appointed by the Governor, and certain hospital interns.

There are four classes of membership as follows:

(i) Group 1: Most general employees in State and local government

(ii) Group 2: Certain specified hazardous duty positions

(iii) Group 3: State police officers and inspectors

(iv) Group 4: Local police officers, firefighters, and designated employees of the municipal light department.

For members in more than one group, participation will be proportional.

3. Salary

Salary is defined as gross regular compensation. Salary does not include bonuses, overtime, severance pay, unused sick leave credit, or other similar compensation.

4. Member Contributions

Member contributions vary depending upon date hired as follows:

Date of Hire	Member Contribution Rate
Prior to 1975	5.0% of Salary
1975 to 1983	7.0% of Salary
1984 to 1996	8.0% of Salary
1996 and Later plus	9.0% of Salary
1979 and Later	2.0% of Salary in excess of $30,000

5. Average Salary

Average salary is used to determine a participant's benefit. It is defined as the average salary during the three consecutive-year period that produces the highest average. (Alternatively, if a greater amount results, it is the average rate of salary earned during the period or periods, whether or not consecutive, that constitutes the last three years preceding retirement.)

6. Creditable Service

In general, creditable service is awarded during the period in which a member contributes to the retirement system.

7. <u>Service Retirement</u>

a. <u>Eligibility</u>:

For an employee to be eligible for service retirement (also referred to as superannuation), one of the following conditions must be met:

(i) completion of 20 years of service

(ii) for an employee hired prior to January 1, 1978, attainment of age 55 as an active member

(iii) for an employee hired on or after January 1, 1978, attainment of age 55 as an active member and completion of ten years of service

b. Benefit Amount:

The retirement allowance is determined as a product of the participant's Benefit Rate times Average Salary times Creditable Service, where Benefit Rate is determined from the following table:

Age at	Percentage of Average Salary		
Retirement	Group 1	Group 2	Group 4
65 or Over	.025	.025	.025
64	.024	.025	.025
63	.023	.025	.025
62	.022	.025	.025
61	.021	.025	.025
60	.020	.025	.025
59	.019	.024	.025
58	.018	.023	.025
57	.017	.022	.025
56	.016	.021	.025
55	.015	.020	.025
54	.014	.014	.024
53	.013	.013	.023
52	.012	.012	.022
51	.011	.011	.021
50	.010	.010	.020
49	.009	.009	.019
48	.008	.008	.018
47	.007	.007	.017
46	.006	.006	.016
45	.005	.005	.015
44	.004	.004	.004
43	.003	.003	.003
42	.002	.002	.002
41	.001	.001	.001

8. <u>Deferred Vested Retirement</u>

a. <u>Eligibility</u>:

A participant who has completed ten or more years of creditable service is eligible for a deferred vested retirement benefit. If termination is involuntary, the participant is vested after six years.

b. <u>Benefit Amount</u>:

The participant's accrued benefit is payable commencing at age 55, or may be deferred until later at the employee's option.

c. <u>Refund of Contributions</u>:

In lieu of the deferred pension benefit, a member may elect to receive a refund of their accumulated contributions. Members with ten or more years of service are entitled to 100% of the credited interest on their contributions. Members with five to ten years of service are entitled to 50% of the credited interest on their contributions. No credited interest is provided for members with less than five years of service.

9. <u>Accidental Disability</u>

a. <u>Eligibility</u>:

Participants are eligible for an accidental disability benefit, regardless of service or age, if they become permanently and totally incapacitated for further duty as a result of personal injury sustained while in the performance of duties.

b. <u>Benefit Amount</u>:

The accidental disability amount is 72% of annual salary plus $648.48 per year for each child plus an additional annuity based upon accumulated Member Contributions with credited interest.

10. <u>Ordinary Disability</u>

a. <u>Eligibility</u>:

An ordinary disability occurs when a member becomes permanently and totally disabled due to sickness or injury that is not job related. In order to be eligible for an ordinary disability benefit, a member must have ten years of service (and be less than age 55).

b. <u>Benefit Amount</u>:

The ordinary disability amount is equal to the accrued retirement benefit as if the member were age 55. If the member was a veteran, the benefit is 50% of the member's final rate of Salary during the preceding 12 months, plus an annuity based upon accumulated Member Contributions plus credited interest. If the participant is over age 55, he will receive not less than the superannuation allowance to which he is entitled.

11. <u>Survivor Benefits</u>

a. <u>Occupational Death</u>:

The survivors of a member who dies due to an occupational injury will be entitled to a lump sum return of contributions plus a pension benefit equal to 72% of the participant's annual Salary.

b. <u>Non-Occupational Death</u>:

Upon the death of a member other than due to an occupational injury, the designated beneficiary will be entitled to a retirement benefit as if Option C had been elected with a minimum of $250 per month to the surviving spouse, plus $120 for the first child, plus $90 for each additional child. If no beneficiary is designated and if the employee worked two years, and is married at least one year, the spouse may elect benefits. If there is no designated beneficiary or surviving spouse, then member contributions are returned. If there are dependent children but no surviving spouse, they may elect minimum survivor benefits of $250 per month plus $120 for the first child and $90 for each additional child.

c. Refund of Contributions:

Upon the death of a member not entitled to survivor benefits, the beneficiary is entitled to a refund of all member contributions with interest.

12. Cost-of-Living Increases

In accordance with the adoption of Chapter 17 of the Acts of 1997, the granting of a cost-of-living adjustment will be determined by an annual vote by the Retirement Board. The amount of increase will be based upon the Consumer Price Index, limited to a maximum of 3.0%, beginning on July 1. All retirees, disabled retirees, and beneficiaries who have been receiving benefits payments for at least one year as of July 1 are eligible for the adjustment. The maximum amount of pension benefit subject to a COLA is $12,000. All COLAs granted to members after 1981 and prior to July 1, 1998 are deemed to be an obligation of the State and are not the liability of the Retirement System.

13. Postretirement Death Benefits

Any benefits following the death of a member after retirement are based upon the form of benefit the participant elected at the time of retirement. There are three available forms as follows:

(i) Option A – Life annuity

(ii) Option B – Life annuity with death benefit equal to excess of member contributions plus credited interest to retirement over annuity benefit paid to member

(iii) Option C – Life annuity with 66-2/3% of benefit continued after death of member to designated joint annuitant

EXHIBIT 6 – ACTUARIAL METHODS AND ASSUMPTIONS:

The actuarial cost method, factors, and assumptions used in determining cost estimates are presented below.

1. Member Data

The member data used in the determination of cost estimates consist of pertinent information with respect to the active, inactive, retired, and disabled members of the employer as supplied by the employer to the actuary.

2. Valuation Date

January 1, 2007.

3. Actuarial Cost Method

The costs of the Plan have been determined in accordance with the individual entry age normal actuarial cost method.

4. Rate of Investment Return

It is assumed that the assets of the fund will accumulate at a compound annual rate of 8.0% per annum.

5. Salary Scale

It is assumed that salaries including longevity will increase at a rate of 5% per year.

6. Cost-of-Living Increases

Cost-of-living increases have been assumed to be 3.0% of the lesser of the pension amount and $12,000 per year.

7. Value of Investments

Assets held by the fund are valued at market value as reported by the Public Employees'

Retirement Administration Commission (PERAC). The actuarial value of assets is determined using a five-year smoothing of asset returns greater than or less than the assumed rate of return.

8. Annual Rate of Withdrawal Prior to Retirement

Based on an analysis of experience, the assumed annual rates of withdrawal may best be illustrated by the following rates at the following ages:

Service	General Employees	Police and Fire Employees
0	0.1500	0.0150
10	0.0540	0.0150
20	0.0200	0.0000
30	0.0000	0.0000

9. Annual Rate of Mortality

It is assumed that both pre-retirement and post retirement mortality are represented by the RP-2000 Mortality Table for males and females. Mortality for disabled members is represented by the RP-2000 Mortality Table set forward two years for all disabled members.

10. Service Retirement

Based on an analysis of experience, the assumed annual retirement rates are illustrated at the following ages:

Age	Male General Employees	Female General Employees	Male and Female Police and Fire Employees
50	0.0100	0.0150	0.02000
51	0.0100	0.0150	0.02000
52	0.0100	0.0200	0.02000
53	0.0100	0.0250	0.05000
54	0.0200	0.0250	0.07500
55	0.0200	0.0550	0.15000
56	0.0250	0.0650	0.10000
57	0.0250	0.0650	0.10000
58	0.0500	0.0650	0.10000
59	0.0650	0.0650	0.15000
60	0.1200	0.0500	0.20000
61	0.2000	0.1300	0.20000
62	0.3000	0.1500	0.25000
63	0.2500	0.1250	0.25000
64	0.2200	0.1800	0.30000
65	0.4000	0.1500	1.00000
66	0.2500	0.2000	1.00000
67	0.2500	0.2000	1.00000
68	0.3000	0.2500	1.00000
69	0.3000	0.2000	1.00000
70	1.0000	1.0000	1.00000

11. Annual Rate of Disability Prior to Retirement

Based on an analysis of experience, the assumed annual rates of disability may best be illustrated by the following probabilities at the following ages:

Attained Age	General Employees	Police and Fire Employees
20	0.0001	0.0001
30	0.0003	0.0003
40	0.0010	0.0030
50	0.0019	0.0125

In addition, it is assumed for the general employees that 45% of all disabilities are ordinary (55% are service connected). For police and fire employees, 10% of all disabilities are assumed to be ordinary (90% are service connected).

12. Family Composition

It is assumed that 80% of all members will be survived by a spouse and that females (males) are three years younger (older) than members.

13. Administrative Expenses

The normal cost is increased by an amount equal to the anticipated administrative expenses for the upcoming fiscal year. The amount for fiscal year 2007 is $100,000 and is anticipated to increase at 4.5% per year.

EXHIBIT 7 – GLOSSARY OF TERMS:

This glossary summarizes the technical terms contained in this report.

1. Actuarial Accrued Liability

That portion of the Actuarial Present Value of plan benefits that is not provided for by future employer Normal Costs or employee contributions.

2. Actuarial Assumptions

Assumptions as to the occurrence of future events affecting the Retirement System such as:

- Rates of investment returns
- Increases in a member's salary
- Inflation
- The probability of mortality, turnover, disablement
- Retirement at each age and other relevant items

3. Actuarial Cost Method

A procedure for allocating the Actuarial Present Value of pension plan benefits between Normal Cost and Actuarial Accrued Liability.

4. Actuarial Present Value

The single sum amount required at the valuation date that is required to provide for anticipated future events based upon the terms of the plan and the Actuarial Assumptions.

5. Forecast

A projection of future benefit payments or contribution requirements based upon the terms of the plan, the current asset amounts, the Actuarial Assumptions, and additional assumptions as to the replacement of terminating employees with new employees.

6. Normal Cost

That portion of the Actuarial Present Value of future benefits that is assigned to the current year.

7. Unfunded Actuarial Accrued Liability

That portion of the Actuarial Accrued Liability that is not provided for by current actuarial value of assets.

8. Valuation Method

The method used to divide the cost of future benefits among the Actuarial Accrued Liability, the current year's Normal Costs, and future years' Normal Costs. The resulting current funding requirement is then determined as the current year's Normal Cost plus the payment necessary to amortize the Unfunded Actuarial Liability.

9. Vested Liability

That portion of the Actuarial Present Value of Accrued Benefits that a member would be entitled to if the member terminated employment with the employer as of the valuation date.

CERTIFICATION:

This report fairly represents the actuarial position of the Town of Hingham Retirement System contributing as of January 1, 2007, in accordance with generally accepted actuarial principles applied consistently with the preceding valuation. In our opinion, the actuarial assumptions used to compute actuarial accrued liability and normal cost are reasonably related to plan experience and to reasonable expectations, and represents our best estimate of anticipated plan experience.

Buck Consultants, LLC

Daniel W. Sherman

Daniel W. Sherman, ASA, MAAA
Enrolled Actuary No. 05-4086

April 2007

BREAKOUTS

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Breakouts

	Total	All Others	Housing	Fire & Police	Electric Light
(1) Payroll of Active Participants	19,177,310	11,025,331	115,206	6,240,663	1,796,110
(2) Fiscal Appropriation					
2008	3,024,454	1,731,815	18,096	980,258	294,285
2009	3,136,021	1,794,184	18,748	1,015,561	307,528
2010	3,251,505	1,858,660	19,422	1,052,056	321,367
2011	3,371,031	1,925,305	20,118	1,089,779	335,828
2012	3,494,731	1,994,185	20,838	1,128,768	350,940
2013	3,622,736	2,065,364	21,581	1,169,057	366,733
(3) Percent of Total Appropriation FYE 2008	100.00%	57.26%	0.60%	32.41%	9.73%

Appropriations are allocated based on the Normal Cost and Accrued Liability for Electric Light. It is based on the ratio of the division payroll to the total payroll as of 1/1/2007 for all others.